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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,462	08/01/2003	Carl K. Knopp	018158-004990US	3822

20350 7590 03/28/2008  
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SAN FRANCISCO, CA 94111-3834

EXAMINER
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SHAY, DAVID M

ART UNIT	PAPER NUMBER
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3735

MAIL DATE	DELIVERY MODE
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03/28/2008

PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte*

CARL K. KNOPP, WILLIAM D. FOUNTAIN, JERZY ORKISZEWSKI,  
MICHAEL PERSIANTSEV, H. ALFRED SKLAR, and  
JAN A. WYSOPAL

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Appeal 2008-0760  
Application 10/632,462  
Technology Center 3700

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Decided: March 28, 2008

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Before TONI R. SCHEINER, DONALD E. ADAMS, and ERIC GRIMES,  
*Administrative Patent Judges.*

ADAMS, *Administrative Patent Judge.*

ORDER REMANDING TO THE EXAMINER

This appeal under 35 U.S.C. § 134 involves claims 1-15, the only claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

## INTRODUCTION

The claims are directed to a laser surgery system (claims 1-10) and method of treating a tissue located at a site of an eye of a patient with a laser (claims 11-15). Claims 1 and 10 are illustrative:

1. A laser surgery system for treating a tissue located at a site of an eye, the system comprising:  
a laser making a beam of a treatment light energy, the treatment light energy comprising ablation light energy deliverable to the site so as to effect reshaping of a corneal tissue at the site;  
an imaging system forming an image of a natural tissue structure, the natural tissue structure being in proximity to the site, the image of the site being visible to the user;  
a detector having the image of the structure formed thereon and generating a first electrical signal in response to the image of the structure, the first signal being related to a position of the structure; and  
a processor adapted to generate a second electrical signal in response to the first electrical signal, the second signal stabilizing the beam of treatment light energy delivered to the tissue treatment site as the light energy is delivered to the tissue treatment site.

10. The system of claim 1 further comprising:  
optical path means for receiving the laser beam, for aiming the beam at a position in X-Y directions transverse to the beam, and for focusing the beam at a distance in a Z direction as desired toward the tissue treatment site;  
beam steering means connected to the optical path means for controlling the position at which the beam is aimed in X-Y directions;  
beam focusing means connected to the optical path means for controlling the distance at which the laser beam is focused;  
tracking means for tracking eye movements during the progress of the surgery, including X-Y tracking means for tracking the structure of the eye in X and Y directions, and Z tracking means for tracking movements of the eye in the Z direction toward and away from the system; and  
safety interrupt means for interrupting delivery of the laser beam to the patient when it is determined that the tracking means has lost the structure being tracked.

The Examiner relies on the following prior art references to show unpatentability:

Bille ('340)	US 4,848,340	Jul. 18, 1989
Bille ('718)	US 4,901,718	Feb. 20, 1990
Kohayakawa	US 5,090,798	Feb. 25, 1992
Knopp	US 2002/0173778	Nov. 21, 2002

The rejections of record are as follows:

1. Claims 1-5, 7, 9, 11, and 14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by '340.
2. Claims 1-7, 9, 11, and 14 stand rejected under 35 U.S.C § 103(a) as unpatentable over the combination of '340 and '718.
3. Claims 10 and 15 stand rejected under 35 U.S.C § 103(a) as unpatentable over the combination of '340, '718 and Kohayakawa.
4. Claims 1-15 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 and 27- 34 of copending Application to Knopp.<sup>1</sup>

## DISCUSSION

### *Anticipation:*

1. Claims 1-5, 7, 9, 11, and 14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by '340.

Appellants' claimed system (claims 1-5, 7, and 9) and method (claims 11 and 14) include a number of specific limitations. "Under 35 U.S.C. § 102, every limitation of a claim must identically appear in a single prior art

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<sup>1</sup> We recognize the Examiner's statement that this provisional rejection is "not under review on appeal because [it was not] . . . presented for review in appellant's [sic] brief" (Ans. 2).

reference for it to anticipate the claim.” *Gechter v. Davidson*, 116 F.3d 1454, 1457 (Fed. Cir. 1997). In support of his finding that claims 1-5, 7, 9, 11, and 14 are anticipated by ‘340, the Examiner states that “Bille et al. (’340) instructs the artisan of ordinary skill to use the system set forth therein with the system described in Bille et al. (’718)” (Ans. 5<sup>2</sup>)<sup>3</sup>. The Examiner’s rejection fails to identify with any particularity where ‘340 teaches every limitation of the rejected claims.

Further, the primary controversy on this record is whether ‘340 teaches a laser surgery system and method that, *inter alia*, forms an image of a “natural tissue structure” (*see, e.g.*, claim 1, claim 11, and App. Br. 5). The Examiner alleges that ‘340 teaches such an image. With reference to column 5, lines 37-38 of ‘340, the Examiner asserts that ‘340 teaches a grid of small incisions created in the cornea and that it is the contrasting reflective property of the incisions relative to the uncut tissue surrounding the incisions that allows ‘340’s electronics to track intensity variations caused by the irregularity created by the incisions (Ans. 6). From this the Examiner reasons that the tissue between the incisions is a “natural tissue structure” within the scope of Appellants’ claims. Directing attention to essentially the same portion of ‘340 relied upon by the Examiner, Appellants assert that ‘340 “teaches that a grid of artificial incisions must be cut into the cornea so that its eyetracker may detect the position of the incisions and ascertain a reference position on the eye” (App. Br. 6). Thus, the issue is, does ‘340 teach a system and method that comprises an image of a “natural

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<sup>2</sup> The Answer (Ans.) is not paginated. Accordingly, we refer to page numbers as if the Ans. was paginated starting with the first page as page 1.

<sup>3</sup> The Examiner makes the same statement at page 3 of the Final Office Action mailed December 2, 2005.

tissue structure” or does ‘340 teach an system and method that relies solely on the incision grid – a non-natural tissue structure? The problem we find with this record, is that given the Examiner’s failure to clearly articulate the basis of the rejection and identify the evidentiary basis that supports the finding of anticipation we are unable to resolve the issue presented to us without resorting to speculation.

“The Board of Patent Appeals and Interferences shall, on written appeal of an applicant, *review* adverse decisions of examiners upon applications for patents.” 35 U.S.C. § 6(b) (emphasis added). As set forth in *Gechter*, “[f]or an appellate court to fulfill its role of judicial review, it must have a clear understanding of the grounds for the decision being reviewed,” which requires that “[n]ecessary findings must be expressed with sufficient particularity to enable [the] . . . court without resort to speculation, to understand the reasoning of the board, and to determine whether it applied the law correctly and whether the evidence supported the underlying and ultimate fact-findings.” *Gechter*, 116 F.3d at 1457. Like the Court of Appeals in *Gechter*, this Board requires a clear understanding of the grounds for the decision being reviewed. In this case, the Examiner provides no particular factual findings that clearly address every limitation of Appellants’ claimed invention.

Accordingly, we remand the application to the Examiner to clearly articulate, on this record, the factual bases which lead him to the finding that Appellants’ claims 1-5, 7, 9, 11, and 14 are anticipated by ‘340.

*Obviousness:*

The obviousness rejections before us on this record fare no better than the anticipation rejection. The rejections encompass a plurality of claims but do not state with any specificity why any individual claim is unpatentable. Accordingly, we remand the application to the Examiner to clearly articulate, on this record, the factual findings which lead him to the conclusion that Appellants' claims 1-7, 9, 11, and 14 are obvious in view of the combination of '340 and '718; and claims 10 and 15 are obvious in view of the combination of '340, '718 and Kohayakawa.

In this regard, we direct the Examiner's attention to MPEP § 706.02(j) for a model of how to explain a rejection under this section of the statute. Adherence to this model will of necessity require that the Examiner consider the patentability of the claims in an individual manner and set forth the facts and reasons supporting a conclusion that individual claims are unpatentable.

CONCLUSION

In summary, the application is remanded to the Examiner to address the foregoing issues.

REMANDED

Ssc:

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